

**PATENT APPLICATION**  
**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re application of

Docket No: Q80508

Dieter LAU

Appln. No.: 10/825,329

Group Art Unit: 3746

Confirmation No.: 7908

Examiner: Charles Grant FREAY

Filed: April 16, 2004

For: METHOD FOR OPTIMIZING THE OPERATION OF A PLURALITY OF  
COMPRESSOR ASSEMBLIES OF A NATURAL-GAS COMPRESSION STATION

**STATEMENT OF SUBSTANCE OF INTERVIEW**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Please review and enter the following remarks summarizing the telephonic interview  
conducted on November 18, 2008<sup>1</sup>:

**REMARKS**

An Examiner's Interview Summary Record (PTO-413) was mailed on December 2, 2008.

During the interview, the following was discussed:

1. Brief description of exhibits or demonstration: None
2. Identification of claims discussed: Claim 1
3. Identification of art discussed: None

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<sup>1</sup> Applicants note that the Examiner indicated in the Interview Summary of December 2, 2008, a date of interview of November 19, 2008. However, the telephonic interview was conducted on November 18, 2008.

4. Identification of principal proposed amendments: Applicant's representatives proposed deleting the term "filed" in line 5 of claim 1 for clarity.

5. Brief Identification of principal arguments: The steps of claim 1 were discussed in view of the specification and in particular with respect to FIG. 1. Applicant's representatives explained the elements of FIG. 1 and explained that the elements of FIG. 1 would be understood by a person of ordinary skill in the art. Furthermore, the following steps of claim 1 were discussed in detail with emphasis on the underscored passages:

running the rotational speeds of the running compressor assemblies in a fixed rotational speed ratio with respect to characteristic-map data filed for each compressor assembly,

thereafter varying the rotational speed ratio by means of an equal-percentage adjustment of an operational volume of each of the running compressor assemblies and thereby adjusting the throughflow quantity of the natural-gas compression station via the rotational speed, until surge prevention valves of each of the running compressor assemblies of the natural-gas compression station are closed,

thereafter leading the operating points of the compressor assemblies in their characteristic maps toward the maximum efficiency line by varying the rotational speeds of the running compressor assemblies,

thereafter, in a continuous operating mode of the natural-gas compression station, determining rotational-speed desired values by means of a reciprocal mutually coordinated variation of the rotational-speed values of the compressor assemblies, in which the compressor station has a minimal fuel consumption of the natural-gas compression station and a minimal emission of an exhaust-gas quantity

In particular, Applicant's representatives explained that an operating point of the compressor assemblies is a point within the characteristic map of the compressor assembly, which can be different for each assembly. It was also explained how such a point is determined in the characteristic map with respect to the variables, such as operational volume or rotational

speed. Furthermore, the process of surge prevention was discussed and how the rotational speed ratio is varied by means of an equal-percentage adjustment of an operational volume of the compressor assemblies until surge prevention valves are closed.

Finally, the step of a reciprocal mutually coordinated variation of the rotational-speed values was discussed. Specifically, a person of ordinary skill in the art would understand this step as a fine tuning of the operating points of the compressor assemblies in order to achieve optimum values for all compressor assemblies in the compressor station.

6. Indication of other pertinent matters discussed: None

7. Results of Interview: The Examiner agreed that claim 1 describes steps which would have been clearly understood by a person of ordinary skill in the art and would have enabled such a person to make and use the invention. The Examiner indicated that further search will be necessary and a new Office Action will be issued.

It is respectfully submitted that the instant STATEMENT OF SUBSTANCE OF INTERVIEW complies with the requirements of 37 C.F.R. §§1.2 and 1.133 and MPEP §713.04.

**It is believed that no petition or fee is required.** However, if the USPTO deems otherwise, Applicant hereby petitions for any extension of time which may be required to maintain the pendency of this case, and any required fee, except for the Issue Fee, for such extension is to be charged to Deposit Account No. 19-4880.

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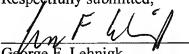
WASHINGTON OFFICE

**23373**

CUSTOMER NUMBER

Date: December 18, 2008

Respectfully submitted,

  
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